

Thiruvananthapuram, for comments on an earlier draft of the manuscript. We are grateful to Mr. Peter Smetacek, expert Lepidopterist working on Himalayan Lepido-Fauna for reviewing the final manuscript. Special thanks to Dr. Keith Wolf (California) who provided us with most of the older

references on the species. We are thankful to P.B. Biju, J. Krishnajith and Satheesh, members of Warblers and Waders survey team for field support and encouragement. We are also thankful to B.S. Aryameher, first author's daughter, for her constant field support for successful rearing of the larvae.

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16. RECORD OF *HEXABRANCHUS SANGUINEUS* (RÜPPELL & LEUCKART, 1828) FROM LAKSHADWEEP ARCHIPELAGO, INDIA

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Introduction

Indian opisthobranchs have received attention only in the recent times with extensive work by Apte and Bhawe along the west coast of India (Apte 2009; Apte *et al.* 2010). Besides Apte (2009), the only work on the Lakshadweep Opisthobranch fauna was by Gardnier (1903) and Rao *et al.* (1974). Valdés (2002) in his paper on *Hexabranchnus* discussed taxonomic confusion regarding this genus. Valdés (2002) has provided a comprehensive synonymy for the species. *H. sanguineus* is a widespread species in tropical Indo-west Pacific and it shows remarkable colour variation.

Hexabranchnus sanguineus commonly called as the 'Spanish Dancer', is one of the largest nudibranch growing up to 55 cm (Double 1992; Debelius 2004) and an active swimmer. There are unpublished records of the species growing up to 90 cm.

Results and Discussion

On July 14, 2010, during a night search at low tide on the eastern reef of Agatti Island, Lakshadweep Archipelago, west coast of India, we came across two specimens of *H. sanguineus* (Family Hexabranchnidae).

The specimen from Lakshadweep shows distinct colour variation from the specimens found in Andaman. Colour of the specimens from Lakshadweep is dark cherry red as compared to pink coloured individuals from Andaman. Both the specimens are illustrated here for comparison (Figs 1 and 2). Gardnier (1903) reported two species of *Hexabranchnus* (*H. faustus* and *H. digitatus*) from Maldives. *H. faustus* Bergh, 1878 (Valdes 2002) and *H. digitatus* Eliot, 1903 (Thompson 1972) are now synonyms of *H. sanguineus*. Maldives is located to the south of Lakshadweep Archipelago. Gardnier's expedition to the Maldives and Laccadive Archipelagos in



Fig. 1: *Hexabranchnus* cf. *sanguineus* from Andaman Island measuring 13 cm



Fig. 2: *Hexabranchnus* cf. *sanguineus* from Lakshadweep Island measuring 21 cm

ACKNOWLEDGEMENTS

We take this opportunity to acknowledge the financial support provided by MoEF, GoI, under AICOPTAX and administrative support provided by the Department of Environment and Forests, Lakshadweep. We are also thankful to LEAD International, Darwin Initiative, for the Whitley Fund for Nature and Shears Foundation, who has supported Project Giant Clam at Lakshadweep. I am also thankful to Mr. Thirunaavukarasu S., CCF, Lakshadweep, and Dr. Sayed Ali for continued support for Project Giant Clam.

1903 was one of the major expeditions to these reefs. However, the expedition in Lakshadweep was confined only to the Minicoy Island, which is the southernmost island of the Lakshadweep Archipelago and nearest to Maldives. The present sighting is from Agatti Island, which is over 300 nautical miles north of Minicoy Island.

The present find extends the range of *H. sanguineus* to the west coast of India.

Size: 20 cm and 21 cm. Of the two specimens only one was collected and stored in 90% ethyl alcohol, after studying the morphological characters. The specimen is deposited in the BNHS Collections.

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17. AN AMPLIFIED DESCRIPTION OF HITHERTO LITTLE KNOWN THREATENED SPECIES, *PRIMULA GLOMERATA* PAX (PRIMULACEAE)

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Introduction

During a field study in North Sikkim (September-October 2007), a species of *Primula* L. was collected about 10 km from Lachung towards Yumthang, at an altitude of about 3,300 m. After critical study, it was identified as *P. glomerata* Pax (identified in CAL by matching type material). Pax (1905) described this species based on J. Scully specimens (no. 287, CAL) from Nepal Himalaya. The species was reported from India as *P. crispa* by Balfer and Smith (1916) based on the collection by Smith (no. 4209, CAL!) from Ningbil in Sikkim. However, herbarium studies (CAL) revealed that the species was first discovered by T. Anderson from Dzongri in West Sikkim in 1862 before the description by Pax (1905). Subsequently, the species was described by Smith and Fletcher (1944), Gould (1982), Polunin and Stainton (1984), Richards (1993), Hu chi-ming and Kelso (1996), and Basak (2001). Foremost among others, Richards and Basak revised in detail, especially Basak (2001) described *P. glomerata* based on the

very old herbarium specimens (CAL) collected by T. Anderson (no. 830) and King's collector *s.n.* (acc. nos. 272260, 272261, 272263, 272938) from Dzongri in West Sikkim and described without a line drawing. The present paper embodies an amplified description and detailed line drawing based on live collections from North Sikkim (S. Panda 30792, CAL & Barasat Govt. College herbarium) in 2007.

The genus *Primula* L. consisting of about 430 species (Mabberley 2008) is confined to tropical Asia (mostly at high hills), Europe, Africa (Ethiopia) and South America. Among 430 species, about 106 species (Basak 2001) are reported to occur in India (Himalayas and North-eastern India: Assam, Meghalaya, Manipur and Nagaland), mostly in the Eastern Himalayas.

Primula glomerata Pax in Engl. Pflanzenr. 4. 237 (Ht. 22). Primulaceae: 92. 1905; W.W. Sm. and Fletcher, *Trans. Proc. Bot. Soc. Edinburgh* 34(1): 156. 1944; Weibel, *Candollea* 15: 162. 1956; Gould in Hara *et al.* (ed.), Enum.